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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,674	12/08/2000	Ralph Coleman Hedden	H26187-US	2847

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EXAMINER

MOORE JR, MICHAEL J

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,674

Applicant(s)

HEDDEN, RALPH COLEMAN

Examiner

Michael J. Moore, Jr.

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1, 4, 5, 7-14, 16, and 18-20** are rejected under 35 U.S.C. 102(e) as being anticipated by Kaplan et al. (U.S. 6,144,641) ("Kaplan"). Kaplan teaches all of the limitations of the listed claims with the reasoning that follows.

Regarding claim 1, "a method for selecting a Datalink Service Provider route for each individual digital message" is anticipated by the method performed by the system of Figure 1 where a data file (digital message) is transferred using one of a plurality of interfaces (T1, LAN, WAN, POTS, wireless). "Providing a unique prioritization tag for the each individual digital message based on factors provided by Datalink Service Providers, the unique prioritization tag comprising user chosen routing priority criteria" is anticipated by the relative weights (prioritization tag) chosen by a user that are stored in user priorities memory 32 as spoken of on column 6, lines 29-42 and that are set based upon the predetermined parameters and measurable parameters (factors shown in Tables A and B) of the different routes (Datalink Service Providers) obtained in path analysis block 24 of Figure 1.

"Supplying the prioritized criteria from the user to an overlay software" is anticipated by routing optimization block 26 of Figure 1 that receives the set user priorities from user priorities block 32. "Automatically choosing the Datalink Service Provider route by evaluating the prioritized criteria in the overlay software" is anticipated by routing optimization block 26 that takes the parameters (Tables A and B) and calculates $f_{finalvalue}(i)$ for each path in the system in order to select the optimal path as spoken of on column 6, lines 12-19. Lastly, "routing the each individual digital message through the chosen Datalink Service Provider route" is anticipated by routing the file to the selected interface upon determining the interface with the highest $f_{finalvalue}$ as shown in Figure 2.

Regarding claim 4, "repeating steps a) through d) for a next user" is anticipated by the method performed by the system of Figure 1 where a user data file (digital message) is transferred using one of a plurality of interfaces (T1, LAN, WAN, POTS, wireless).

Regarding claim 5, "repeating steps a) through d) for a next digital message" is anticipated by the transmission of multiple data files in either a serial or parallel basis as spoken of on column 8, lines 16-21.

Regarding claim 7, "wherein the step of choosing a Datalink Service Provider route is performed at a member of the group consisting of a vehicle, a user initiation facility, and government control facility" is anticipated by the setting of user priorities at user interface 34 of Figure 1 as spoken of on column 6, lines 43-59.

Regarding claim **8**, "wherein the step of providing a unique prioritization tag comprises providing a manual tag" is anticipated by a user overriding via input to a user interface 34 the fixed parameter weights (prioritization tag) as spoken of on column 6, lines 43-47.

Regarding claim **9**, "wherein the step of providing a unique prioritization tag comprises providing an automatic tag" is anticipated by the relative weights (prioritization tag) chosen by a user that are stored in user priorities memory 32 as spoken of on column 6, lines 29-42 and that are set based upon the predetermined parameters and measurable parameters (factors shown in Tables A and B) of the different routes obtained in path analysis block 24 of Figure 1.

Regarding claim **10**, "wherein the overlay software comprises at least one of the following: lookup tables, logarithmic calculations and real-time information on cost, available Datalink Service Provider routes, and Datalink Service Provider route status information" is anticipated by the \$availability, \$bandwidth, \$reliability, \$economy, etc. parameters (route status information) provided to routing optimization block 26 (overlay software) as shown in Figure 1.

Regarding claim **11**, "updating the real-time information" is anticipated by the measurable parameter data collected by path analysis block 24 from each interface in real-time as spoken of on column 4, lines 22-26.

Regarding claim **12**, "wherein the step of updating comprises time-based updates" is anticipated by the measurable parameter data collected by path analysis block 24 from each interface in real-time as spoken of on column 4, lines 22-26.

Regarding claim **13**, “querying at least one Datalink Service Provider” is anticipated by the measurable parameter data collected by path analysis block 24 from each interface (query to Datalink Service Provider) in real-time as spoken of on column 4, lines 22-26.

Regarding claim **14**, “an avionics routing method for an individual digital message” is anticipated by the method performed by the system of Figure 1 where a data file (digital message) is transferred using one of a plurality of interfaces (T1, LAN, WAN, POTS, wireless). “Providing a unique prioritization tag for the individual digital message based on factors provided by at least two Datalink Service Providers, the unique prioritization tag comprising user chosen routing priority criteria selected from the factors” is anticipated by the relative weights (prioritization tag) chosen by a user that are stored in user priorities memory 32 as spoken of on column 6, lines 29-42 and that are set based upon the predetermined parameters and measurable parameters (factors shown in Tables A and B) of the different routes (Datalink Service Providers) obtained in path analysis block 24 of Figure 1.

“Supplying the priority criteria from the user to an overlay software” is anticipated by routing optimization block 26 of Figure 1 that receives the set user priorities from user priorities block 32. “Evaluating the priority criteria by the overlay software” and “automatically choosing a Datalink Service Provider route from the at least two Datalink Service Provider service providers by the overlay software” is anticipated by routing optimization block 26 that takes the parameters (Tables A and B) and calculates $f_{\text{finalvalue}}(i)$ for each path in the system in order to select the optimal path as spoken of

on column 6, lines 12-19. Lastly, "transmitting the individual digital message through the chosen Datalink Service Provider route" is anticipated by routing the file to the selected interface upon determining the interface with the highest \$finalvalue as shown in Figure 2.

Regarding claim **16**, "repeating steps a) through e) for a next digital message" is anticipated by the transmission of multiple data files in either a serial or parallel basis as spoken of on column 8, lines 16-21.

Regarding claim **18**, "wherein the overlay software comprises at least one of the following: lookup tables, logarithmic calculations and real-time information on cost, available Datalink Service Provider routes, and Datalink Service Provider route status information" is anticipated by the \$availability, \$bandwidth, \$reliability, \$economy, etc. parameters (route status information) provided to routing optimization block 26 (overlay software) as shown in Figure 1.

Regarding claim **19**, "wherein the prioritized criteria comprises at least one of the following criteria: cost of sending the digital message, speed of delivery of the digital message, security of the digital message, and integrity of the digital message" is anticipated by the relative weights (prioritization tag) chosen by a user that are stored in user priorities memory 32 as spoken of on column 6, lines 29-42 and that are set based upon the predetermined parameters and measurable parameters (factors shown in Tables A and B relating to economy, bandwidth, security, and reliability) of the different routes (Datalink Service Providers) obtained in path analysis block 24 of Figure 1.

Regarding claim **20**, "wherein the prioritized criteria comprises at least one of the following criteria: a cost of sending the digital message, speed of delivery of the digital message, security of the digital message, and integrity of the digital message" is anticipated by the relative weights (prioritization tag) chosen by a user that are stored in user priorities memory 32 as spoken of on column 6, lines 29-42 and that are set based upon the predetermined parameters and measurable parameters (factors shown in Tables A and B relating to economy, bandwidth, security, and reliability) of the different routes (Datalink Service Providers) obtained in path analysis block 24 of Figure 1.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **2, 3, and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan et al. (U.S. 6,144,641) ("Kaplan") in view of Kung et al. (U.S. 6,775,267) ("Kung").

Regarding claims **2 and 15**, Kaplan teaches the methods of claims **1 and 14**. Kaplan does not explicitly teach the tracking of the chosen Datalink Service Provider route for accounting purposes. However, Kung teaches a method where billing choices are provided to a subscriber as a function of network path selection by providing a network path display of alternative network paths in priority order by cost of connection as spoken of on column 2, lines 25-30. At the time of the invention, it would have been

obvious to someone skilled in the art to combine the path cost accounting teachings of Kung with the teachings of Kaplan in order to provide real-time selection and billing choices to a subscriber as a function of network path selection as stated in column 2, lines 25-30 of Kung.

Regarding claim 3, Kaplan in view of Kung teaches the method of claim 2. Kaplan does not explicitly teach preparing a billing record of the chosen Datalink Service Provider route. However, Kung teaches the use of bill processors that receive accounting information and generate appropriate on-line or paper billing records for customers on column 16, lines 20-26. At the time of the invention, it would have been obvious to someone skilled in the art to combine the billing record teachings of Kung with the teachings of Kaplan in order to provide current billing information to customers based upon customer usage.

Response to Arguments

5. Applicant's arguments with respect to claims **1, 4, 5, 7-14, 16, and 18** have been considered but are moot in view of the new ground(s) of rejection provided above.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kobayashi et al. (U.S. 5,337,352) is also pertinent to this application.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:30am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mjm MM


FRANK DUONG
PRIMARY EXAMINER

Michael J. Moore, Jr.
Examiner
Art Unit 2666